In the Claims:

Claim 1 (Previously presented): A DNA molecule comprising a coding sequence for a mutant protein, wherein said mutant protein is a mutant DNA polymerase selected from the group consisting of: *E. coli* DNA polymerase I, Klenow fragment of *E. coli* DNA polymerase I, *Streptococcus pneumoniae* polymerase, *Thermus aquaticus* polymerase, *Thermus flavus* polymerase, *Thermus thermophilus* polymerase, *Deinococcus radiodurans* polymerase, *Bacillus caldotenax* polymerase, *E. coli* bacteriophage T5 polymerase, mycobacteriophage L5 polymerase, *Thermatoga maritima* polymerase, and *E. coli* bacteriophage SP01 polymerase, wherein said mutant DNA polymerase comprises a substitution of Tyr for Phe at a position in said polymerase corresponding to Phe_{570} of wild-type T5 polymerase.

Claim 2 (Previously presented): The DNA molecule of claim 1, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

Claim 3 (Previously presented): The molecule of claim 2, wherein said coding sequence is heterologous to said promoter.

Claim 4 (Previously presented): A host cell comprising the DNA molecule of claim 1.

Claim 5 (Previously presented): The host cell of claim 4, wherein said host cell is *E. coli*.

Claim 6 (Previously presented) A method for producing a protein, wherein said protein is a mutant DNA polymerase selected from the group consisting of: *E. coli* DNA polymerase I, Klenow fragment of *E. coli* DNA polymerase I, *Streptococcus pneumoniae* polymerase, *Thermus aquaticus* polymerase, *Thermus flavus* polymerase, *Thermus thermophilus* polymerase, *Deinococcus radiodurans* polymerase, *Bacillus caldotenax* polymerase, *E. coli* bacteriophage T5 polymerase, mycobacteriophage L5 polymerase, *Thermatoga maritima* polymerase, and *E. coli* bacteriophage SP01 polymerase, comprising a substitution of Tyr for Phe at a position in said polymerase corresponding to Phe_{570} of wild-type T5 polymerase, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 2, and

(b) isolating said protein from said host cell.

Claims 7-14 (Cancelled).

Claim 15 (Previously presented): A DNA molecule as claimed in claim 1, wherein said mutant protein is a mutant Taq DNA polymerase comprising a substitution of Tyr for Phe_{667} of wild-type Taq polymerase.

Claim 16 (Previously presented): The DNA molecule of claim 15, further comprising a promoter, wherein said promoter is in a position and orientation with respect to the coding

sequence such that the mutant protein may be expressed in a cell under the control of said promoter.

Claim 17 (Previously presented): The molecule of claim 16, wherein said coding sequence is heterologous to the promoter.

Claim 18 (Previously presented): A host cell comprising the DNA molecule of claim 15.

Claim 19 (Previously presented): The host cell of claim 18, wherein said host cell is *E. coli*.

Claim 20 (Previously presented): A method for producing a protein, wherein said protein is a mutant Taq DNA polymerase comprising a substitution of Tyr for Phe_{667} of wild-type Taq polymerase, said method comprising:

(a) culturing a host cell comprising the DNA molecule of claim 16, and

(b) isolating said protein from said host cell.

Claims 21-28 (Cancelled).